

Exhibit B

Minutes from January 25-26, 1999

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**Working Group:**                    **Physical and Link Layer**

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**TITLE:**                                **January 1999 Meeting Minutes**

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**DATE:**                                **May 4, 1999**

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**ABSTRACT:**

This contribution presents Minutes from the January 1999 PLL WG Meeting.

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# **Optical Internetworking Forum Technical Committee Physical and Link Layer Working Group Meeting Minutes**

Monday, January 25 – Tuesday, January 26, 1999  
Orlando Marriott International Drive Hotel,  
Orlando, Florida

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## **I. Introduction**

The OIF TC Physical Working Group met on Monday, January 25 and Tuesday, January 26, 1999. This contribution presents minutes from the meeting.

## **II. Working Group Name**

During the January 1999 closing plenary, the name of the Working Group was changed to the OIF TC Physical and Link Layer (PLL) Working Group. This name will be used in the minutes.

## **III. Charter**

The PLL WG agreed on the following PLL WG charter.

The OIF Physical Layer Working Group specifies implementation agreements related to physical and data-link layer interfaces between Optical Internetworking elements, reusing existing standards when applicable. The OIF Physical Layer Working Group focuses on those functions and characteristics necessary to define and establish the interconnection of signals between Optical Internetworking equipment. The OIF Physical Layer Working Group defines the transport mechanisms necessary to support OAM&P functions. The charter of the OIF Physical Layer WG includes the concept, definition, analysis, and documentation of matters pertaining to the interconnection of Optical Internetworking signals. The OIF Physical Layer WG also may specify internal hardware-based interfaces between functions within a system.

## **IV. Contributions**

The PLL WG reviewed the following contributions:

- OIF99.005.0, Contribution to the OIF Living Lists, Hans Koffler, Siemens AG;
- OIF99.004.0, Premises OC-48/OC-192 & 10 Gb/s Ethernet Fiber Optic Links, Del Hanson & Dan Rausch, Hewlett-Packard Company;

- OIF99.011.0, Optical Transport Networking via "Digital Wrappers, Paul Bonenfant, et. Al., Lucent;
- OIF99.013.1, Jitter Accumulation for Optical Internetworks, Brad Kanack, CIENA Corporation.

## **V. Approved Projects**

The PLL WG approved the following three projects:

- Develop interfaces based on POS at 155 Mb/s, 622 Mb/s, and 2.5 Gb/s;
- Develop a 10 Gb/s interface based upon SONET/SDH standards;
- Develop a lower-cost 10 Gb/s interface for intra-office data applications.

## **VI. Project Issues**

During discussion, the following issues were listed to apply to all 3 projects:

- Jitter
- Optical power levels
- Clocking
- Media frame structure
- DCC mechanism
- L2 framing (POS, SDL)
- Different interface types
- Connectors
- Physical media characteristics
- Bit rates
- Protection switching mechanisms
- Optical Supervisory Channel mechanisms
- Transmission performance monitoring mechanisms
- Tandem connection monitoring mechanisms

## **VII. Living List**

The PLL WG approved four motions.

Del Hanson, HP, moved to:

- Include the 4x2.5 Gb/s Wide-WDM PMD on the Living List for implementation of a low-cost, intra-office, SMF, OC-192 and/or 10 Gb/s Ethernet interface.

The motion was seconded by Larry McAdams and approved many to one.

Del Hanson, HP, moved to:

- Include a parallel optic (ribbon fiber) PMD on the Living List for implementation of a low-cost, intra-office, fiber, 10 Gb/s interface

Stan Hanks, Enron, seconded the motion and it was unanimously approved.

Hal Zarem, Uniphase, moved to:

- Include a serial optic PMD on the Living List for implementation of a low-cost, intra-office, fiber, 10 Gb/s interface

Geoff Garner seconded the motion and it was unanimously approved.

Iain Verigin, PMC-Sierra, moved to:

- Put the complete and in-progress ATM Forum SONET/SDH Phy specifications on the Living List as a basis for the first work item, pending research into Intellectual Property issues.

Steve Carlton seconded the motion and it was unanimously approved.

### **VIII. POS Editor**

Larry McAdams, Cisco Systems, volunteered to edit the POS document.